

# *DWR Climate News Digest*

## *February 2019*

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The information provided in the DWR Climate News Digest is a selected compilation of recent popular news articles, publications, and other information relevant to climate change and water management, and is intended to provide educational and thought-provoking material for water managers and water users.

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## **TOPICS**

### ***Agriculture/Food Production***

#### [World's food supply under 'severe threat' from loss of biodiversity](#)

[The Guardian – February 21, 2019]

*“Most countries said the main driver for biodiversity loss was land conversion, as forests were cut down for farm fields, and meadows covered in concrete for cities, factories and roads. Other causes include overexploitation of water supplies, pollution, over-harvesting, the spread of invasive species and climate change.”*

#### [The World Is Losing Fish to Eat as Oceans Warm, Study Finds](#)

[New York Times – February 28, 2019]

*“Fish populations are declining as oceans warm, putting a key source of food and income at risk for millions of people around the world, according to new research.”*

### ***General Water Management***

#### [Rare L.A. mega-storm could overwhelm dam and flood dozens of cities, experts say](#)

[Los Angeles Times – February 18, 2019]

*“This rare mega-storm — which some say is rendered all the more inevitable due to climate change — would last for weeks and send more than 1.5 million people fleeing as floodwaters inundated cities and formed lakes in the Central Valley and Mojave Desert, according to the U.S. Geological Survey. Officials estimate the structural and economic damage from an ARkStorm (for Atmospheric River 1,000) would amount to more than \$725 billion statewide.”*

### [Population and Climate Change Point to Future Water Shortages](#)

[EOS Earth and Space Science News – February 28, 2019]

*“Climate change plus population growth are setting the stage for water shortages in parts of the U.S. long before the end of the century, according to a new study in the AGU journal Earth’s Future.”*

### **Sea-Level Rise and other Ocean Impacts**

#### [Climate change will even change the color of the oceans, study says](#)

[CNN – February 4, 2019]

*“The ocean will not look the same color in the future. It won't turn pink or anything radically different; the change will be more apparent through optic sensors than through the human eye. But it serves as an early warning sign that global warming is significantly altering the planet's ecosystems, according to a new study.”*

#### [Most dire projection of sea-level rise is a little less likely, reports say](#)

[National Geographic – February 6, 2019]

*“New analysis of Antarctica's melting glaciers refines our understanding of climate change, while risks of global impacts remain significant.”*

### **Extreme Weather Events**

#### [Wildfires, hurricanes and other extreme weather cost the nation 247 lives, nearly \\$100 billion in damage during 2018](#)

[Washington Post – February 6, 2019]

*“The number of billion-dollar weather disasters in the United States has more than doubled in recent years, as devastating hurricanes and ferocious wildfires that experts suspect are fueled in part by climate change have ravaged swaths of the country, according to data released by the federal government.”*

#### [Today's floods in California may be a preview of a more extreme future](#)

[The Verge – February 27, 2019]

*“A storm in northern California dumped so much water on the region that roads turned into moats, isolating two California towns. It's the kind of storm that experts project might become more extreme as climate change continues — which could mean a future of even worse flooding for California.”*

### **Human Health Impacts**

#### [The disturbing hypothesis for the sudden uptick in chronic kidney disease](#)

[Vox – February 15, 2019]

*“Researchers are now coming together around a hypothesis about what's driving a little-appreciated epidemic, known as ‘Mesoamerican nephropathy’. The main suspect: global warming. The basic idea: When people are exposed to long stretches of extreme heat, they sweat more. If they don't rehydrate, or don't have access to clean drinking water, the kidneys,*

*which are supposed to filter waste and regulate fluid in the body, get stressed. Over time, that stress can lead to kidney stones and chronic damage.*

#### [Climate change could raise risk of congenital heart defects](#)

[Reuters – February 19, 2019]

*“More babies could be born with heart defects in the future as global warming puts pregnant women at greater risk of exposure to dangerously high temperatures, new research suggests.”*

### **Wildlife and Ecosystem Impacts**

#### [California’s peak fire season is shifting toward December, study shows](#)

[San Francisco Chronicle – January 31, 2019]

*“Wind-whipped wildfires like those that have ravaged California in recent years may crop up later and later into the year, says a team of scientists that has found that climate change is causing wind and dry weather to converge on December.”*

#### [Global Warming Could Melt At Least a Third of Himalayan Glaciers](#)

[NPR – February 5, 2019]

*“Glacial melting will also likely cause global sea levels to rise, threaten already endangered species like the snow leopard and tiger and dramatically change the roof of the world.”*

### **Greenhouse Gas Mitigation**

#### [Trump administration quits fuel efficiency talks with California](#)

[The Washington Post – February 21, 2019]

*“The breakdown sets up a potential clash over the state’s long-standing ability to set its own more stringent standards for tailpipe emissions and fuel efficiency, a power the courts have upheld for the past half-century.”*

#### [Here's How PG&E's Bankruptcy Might Hurt California's Ambitious Climate Goals](#)

[Bloomberg Businessweek – February 28, 2019]

*“PG&E filed for chapter 11 protection because of potentially billions in liability over recent wildfires. That has solar and wind companies concerned that the utility will be paying them less, or even nothing in the future.”*

### **Climate Change Modeling**

#### [Very high carbon dioxide could suppress cooling clouds, climate change model warns](#)

[Washington Post – February 25, 2019]

*“That’s the unsettling conclusion of a study published in the journal Nature Geoscience, based on a computer model that provides a new warning that climate change could deliver surprises on top of the already existing and clearly predictable consequences.”*

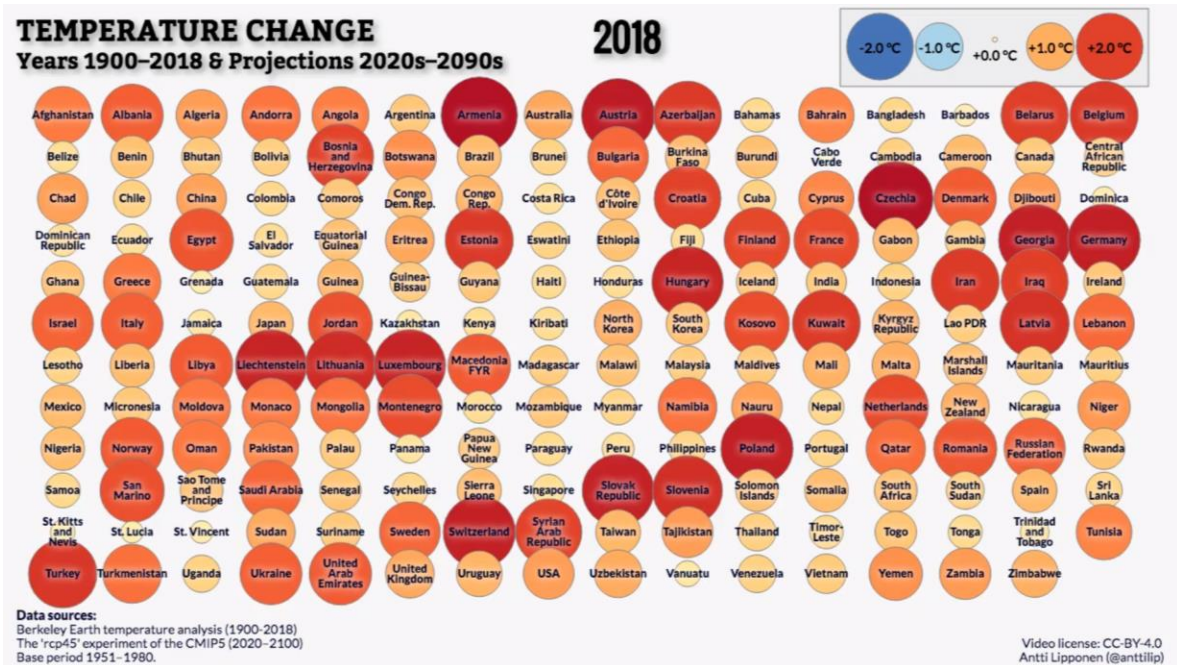
## Additional Items of Interest

[Wallace Broecker, who helped popularize term 'global warming,' dies at 87](#)

[Washington Post – February 19, 2019]

*“Wallace S. Broecker, a geochemist who issued early warnings on global warming — a term he helped popularize in the 1970s — and later developed a sweeping, widely accepted model for how the oceans circulate heat and affect Earth’s climate, died Feb. 18 at a hospital in Manhattan. He was 87.”*

## Images to Ponder



## [A Look at Past and Future Climate Change in Less Than a Minute](#)

***Two new videos visualize how drastically global temperatures have changed since 1900 — and how much worse they will get by the end of this century. The data visualizations, created by Antti Lipponen, a research scientist at the Finnish Meteorological Institute, depict 200 years of climate change in each of the world’s 191 countries in less than a minute.***

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